

Centre for Applied Social Sciences



**Proceedings of the
Regional Conference on Gender Issues in
Community-Based Natural Resource Management**

C B N R M

(Cresta Lodge, Harare : 24 – 27 August 1998)

Compiled by

Nontokozo Nabane

September 1998

University of Zimbabwe

CENTRE FOR APPLIED SOCIAL SCIENCES *

University of Zimbabwe

P O Box MP 167

Mount Pleasant

HARARE

Zimbabwe

(CASS Occasional Paper - NRM Series; CPN. 97/98)

**Proceedings of the
Regional Conference on Gender Issues in
Community-Based Natural Resource Management**

C B N R M

(Cresta Lodge, Harare : 24 – 27 August 1998)

Compiled by

Nontokozo Nabane

September 1998



**The opinions expressed herein are those of the authors and do not necessarily
reflect the views of CASS or IUCN**

TABLE OF CONTENTS

Acknowledgements.....	ii
Introduction.....	iii
Conceptual Manoeuvring Using Gender as an Analytic Category in CBNRM / Sara Mvududu.....	1
Gender Sensitive Development at Community Level: Experiences from Botswana, Swaziland and Zimbabwe. / Titus Moetsabi.....	19
Participation of Women in Veld Resource Utilisation and Management: A case study of three villages in Botswana. / Rebecca K. Sack.....	29
A Report on Gender in the Forestry Sector in Malawi. / McJones W. M. Shaba.....	35
Preserving Trees: The case of Mozambican Refugees in Malawi. / Violet M. Bonga.....	49
Gender and CBNRM: The case of the Forestry sector in Zambia. / Charlotte M. Wonani	55
Gender Considerations in Forestry: Some cases from Zambia. / Alex K. Nkomeshya.....	67
Gender Issues in CBNRM in Zimbabwe: A case study of Mafungabusi Forest. / Faith Chikandiwa.....	81
Gender and Ethnic Differentiation in CAMPFIRE in Guruve District, Zimbabwe. / Nontokozo Nabane.....	85
The Role of Gender in Natural Resource Management: Using micro projects as a vehicle to establish the role of gender in NRM. / Abby Taka Mgugu.....	107
Voices from the Village: Local Perspectives on the Empowerment of Women through CBNRM in Tsholotsho District, Zimbabwe. / Julia Dube, Regina Maphosa & Gladys Mlotshwa.....	113
CAMPFIRE Programmes in Gwanda South [Zimbabwe]. / Litha Malungisa	117
Recommended Action Plan for CASS.....	119
List of Participants	121

ACKNOWLEDGEMENTS

The success of this conference and the publication of these proceedings has been possible through support from the US Agency for International Development (USAID) under the Natural Resources Management Project (NRMP) Phase II – Zimbabwe. The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID or CASS.

Gender and Community Based Natural Resource Management:

The Case of the Forestry Sector in Zambia

Charlotte M. Wonani

1. Background

Zambia is a country rich in natural resources, but many of these resources have been poorly managed. In the past Zambia focused on copper mining and industrialization paying scant attention to development of agriculture, sustainable management of renewable natural resources and control of environmental pollution.

Zambia, which has an area of about 752,972 Km², is endowed with a rich natural resource base. The forestry resource is the most extensive natural heritage that the country has, covering between 55.1% and 60.1% (PFAP) of the total land mass of country. Forests are a major source of food energy shelter and medicines for humans and provide a habitat for wildlife.

With the decline in the world market prices for copper and through inappropriate past macro-economic policies, the Zambian economy deteriorated significantly between the mid1970's and early 1990's. The situation has caused the collapse of social services, resulting in declining health and educational standards. Currently it is estimated that 69% of the Zambian population are poor (World Bank 1994) with poverty worse in the rural areas and within the rural areas women and children are the poorest. Where as an estimated 42.1% of urban households are poor, 83% of the rural households are so classified. Per capita income in 1992 was the equivalent of USD 290. The human population is currently estimated at 9.2 million (CSO). The population growth is estimated at 3.2% per year (between 1980-1990). Forty-eight percent of the population lives in urban areas. Many rural areas sparsely populated and little development of infrastructure such as roads and links to markets. Many urban areas are overcrowded and poorly planned with problems of inadequate water supply.

The links between poverty and environmental degradation are clearly understood in Zambia. For example, as many people have lost their employment in copper mining and other sectors, they have increasingly been forced to exploit resources to survive. An estimated 40,000-50,000 people maybe illegally squatting in forest reserves in Copperbelt province, and making charcoal (Programme Support Document UNDP 1997). Women and youth are the most affected by environmental degradation and poverty as they have limited access to land and other productive resources as well as limited employment in the formal sector.

Efforts are needed to address environmental degradation, both in terms of rehabilitation of already degraded areas and improved management of existing natural resources. For example, in some areas it may be valuable to encourage the public to plant trees in terms of localised needs for environmental rehabilitation or needs for particular products. Imploring management of existing forest vegetation to prevent forest degradation would have a much larger impact, both in terms of environmental conservation and economic development. Overall, government's role is being redefined to focus on regulation and creation of an "enabling environment" to support local communities and the private sector to take management of productive activities. Efforts are being made to streamline government including reduction in staffing levels and decentralise activities to the local community level. NGOs and CBOs are seen as valuable partners who can, among other roles, assist in the mobilisation of community based action. With respect to environmental and natural resource management, many pilot community based programs already exist. The ADMADE programme for wildlife management has been in operation for 12 years. More recently the Provincial Forestry Action Programme (PFAP) and the Zambezi Teak Management Project have begun supporting community based forestry management efforts. Numerous NGO initiatives deal with community level activities such as land use planning, reforestation, tree nurseries environmental educational etc. The private sector is also supporting community-based activities such as efforts to promote tree planting among tobacco growers.

Although many pilot community based environmental and natural resource management programmes exist, such efforts are poorly co-ordinated. Typically each programme develops its own approach to training extension and information dissemination. Although the environmental problems facing urban communities may differ in some important respects from those in rural communities, as will the pattern of social organisation of **these** communities, nonetheless it would be useful to share approaches and strategies.

2. Gender Perspectives In CBNRM

2.1 Users and Managers: Women's Environmental Roles

The last decade has seen increasing discussion of women's relationships with the environment in both conservation and development policy and circles and ever stronger arguments for involving women in environmental projects. Discussions on women's roles point out that women's work involves interaction with the environment and its resources whether as collectors of fuelwood, hauliers of water or participants in agricultural production. It is also argued that women have particular responsibilities which make them closely dependent or and give them distinct interests in natural resources. Women's responsibilities to provide for daily needs such as food and fuel are common examples. Women have deep and extensive knowledge of natural resources deriving mainly from their ultimate daily experience of them.

The relationship between women and the environment, which derives from these existing roles, has dual dimensions. On one hand women are users of natural resources and rely mainly on them. On the other hand women are active and knowledgeable managers and caretakers of the environment. Both aspects, it is argued, influence links

between women's status and the state of the natural resource base. The degradation of natural resources, including that induced by development processes, can undermine women's ability to perform roles in food production and the collection of fuelwood or water or it can mean that they can fulfil them only with increasing costs to their time and energy (Agarwal 1989).

But women also play an important part in conserving natural resources for instance by planting trees and engaging in soil protection measures. Thus if environment policies fail to take account of women's roles, they risk both having negative impacts on the natural resources on which women rely and failing to make use of women's important skills and knowledge. The forest sector has proved to be a very vital sector in environmental management and use of women's skills and knowledge in the sector.

3. Background to Zambia's Forest Sector

Zambia is one of the most forested countries in Africa. Forests cover approximately 55% of the land area. Most of the forestland is administered traditionally under the customary law. Gazetted forest reserves occupy about 9% of the total land area. The importance of forests and woodlands to the development of the country is widely acknowledged. Their potential, however is not fully realised (Chileshe, *et. al.* 1996).

In many areas forest degradation has been inevitable. Environmental problems are escalating and in densely populated regions an increasing imbalance between the supply and demand of forest products is foreseen. During the past 30 years forestry activities have concentrated in industrial plantations, however, these have largely been under-utilized due to lack of viable industries like pulp and paper manufacturing. Forest form an important component of the rural environment in Zambia through provision of forest products and buffering ecological conditions. However due to various factors forest resources are disappearing. It is now commonly accepted that development programmes for stimulating improved conservation and utilisation of forest/tree resources should be implemented. However for these to be successful they need to be sensitive. (Chileshe, *et.al.* 1996). Deforestation has had different effects on men and women. Women are affected because of their major roles as providers for the domestic needs of the household. The resources affected by forest degradation are part of the traditional household economy in which women play an important role. Although both men and women have become impoverished as a result of economic and ecological factors, women have been hit harder because they have increased workloads, poor nutrition and deteriorating health.

4. Gender Gaps in Forestry Sector

Women are engaged primarily in activities related to the gathering of minor forest produce, and shifting cultivation that provides them with a subsistence livelihood. Over the years, large-scale forest degradation has placed considerable pressure on the communities and has seriously affected their livelihood.

Research and observations indicate that there is a clear participation imbalance between men and women in forestry management and development in Zambia. Men have an

upper hand in accessing and controlling the various issues that play an important role in the natural resources and in particular the forestry sector. Since men have easy access and control of this sector they naturally enjoy most of the benefits compared to women. This imbalance can be attributed to a number of factors such as education of the girl child, cultural/traditional values and society in general and the perception about the involvement of women in technical fields such as forestry. Observations show that it is the women that are in touch with forestry resources on a daily basis for woodfuel, food and medicine to meet their daily family needs. It therefore goes without saying that women experience more problems than men in this sector. Since it is men who make the decisions, which rarely include the views of women to govern forestry development (Chileshe, *et. al.* 1997)

To most women, especially in the rural areas a forest is considered of value as long as it can serve as the source of firewood required for cooking medicinal plants as well as raw materials for other activities such as basket and mat weaving. Of these requirements, firewood supersedes all other needs in view of the need to cook as a primary requisite for family survival. With the fast increase in population, Zambia like many other developing countries is suffering from increased pressure on soil and trees resulting in deforestation and land degradation.

5. The Role Of Women In Fuel Wood Collection In Communal Traditional Forest Lands

Location wise, communal lands are areas in the hinterland of the local population under chiefs' jurisdiction. Of all the interactions women have with the forest, headloading of fuelwood is the epitome of women in forestry and house drudgery in Africa in general and Zambia in particular. Women collect dry wood from forests and cleared areas and carry it in head loads to their homes to use as energy for cooking and heating. Since most household woodfuel in rural areas is not bought, but collected by the consumer, women collect nearly all the wood. But, because wood collection is a subsistence activity like most domestic chores, involving no cash transfers, it is not included in the production statistics or the Gross National Product of the country. This has the consequence of under valuing women's benefit from the forest and the forest sectors' contribution to the national economy.

In the wood deficit areas of Zambia, such as the flood plains of some river valleys (among them the Barotse flood plains, Kafue and Bangweulu swamps, which are by nature mostly open grasslands with sparse tree cover) and in the deforested areas of Eastern and Southern provinces, sources are very far away. Therefore, wood collecting in these areas entails walking longer distances for women compared to their counterparts on the plateau and other well forested areas.

This has therefore led to the substitution of wood based energies for other sources (animal dung, crop waste, grasses etc.) in floodplain ecology in order to reduce the drudgery of wood collection (Chidumayo, 1996).

6. Gender Issues In Woodfuel Production And Utilisation

The goals of Natural Resource Management productivity and efficiency distribution and equity and conservation and environmental quality often raise more questions than answers. The interest in the environment has not always addressed the important role of women. One of the most forceful illustrations has been the social, economic and environmental costs of fuel wood scarcity to women and their families. Studies that have been done on women illustrate with frightening clarity the hours and days spent collecting combustible material for the preparation of cooked food. Continued depletion of natural forest reserves has therefore had serious implications on the daily lives of women. Women now have to walk longer distances to fetch firewood. They have to carry heavier loads to avoid frequent long journeys associated with firewood collection. Other constraints that women face with regards to firewood utilisation include:

1. Equipment and methods used to cut down trees are more suited for use by men.
2. Resources needed for the transportation of firewood is out of reach for most women.
3. Lack of information and financial resources to purchase appropriate energy saving technologies such as improved clay stoves.
4. High human energy input to collect same quantity of firewood regardless of distance covered.

The constraints identified in woodfuel utilisation by women are of technical, economical and sociological nature which continue to perpetuate unequal gender participation in fuelwood collection and utilisation. Several parts of Zambia have been severely affected by deforestation. These would include the Central, Northern, Southern, Western and Luapula provinces. The process has been ongoing and in some parts (eg. The Western province) the only wood fuel sources remaining are dry branches, dead or infertile trees and leaves, reeds and bushes. Deforestation has had different effects in men and women in Zambia. Women are affected more because of their major role as providers for the domestic needs of the household (Chileshe et al, 1997). The resources affected by forest degradation are part of the traditional household economy in which women play an important role. Although both men and women have become impoverished as a result of economic and ecological factors, women have been hit harder because of their multiple work loads, poor nutrition and deteriorating health. In a study done in the Chinyunyu area of Zambia on the impact of deforestation on women 85% of the indicated that they faced a lot of health problems because of the search for firewood. The health problems cited included headaches, backache, swollen feet, and malaria. 45% of the women suffered from swollen feet because of the long distances they travel in search of firewood, 25% experienced backaches while the other 30% experienced headache and malaria (Lwele, 1996).

7. The Role Of Women In Non Wood Forest Products

In Africa and in Zambia in particular women are known more as hauliers of firewood. However, new studies show that the importance of forests to women lies more in the non-wood products they derive from forests and which get lost with deforestation. These range from inputs into shelter construction, food, and medicines to industrial inputs.

7.1 Housing

In the traditional rural setting of most parts of Zambia, houses are still built of indigenous wood and thatched with grass. Grass harvesting and transportation is also a woman's dry season chore. At the height of the agricultural season women are extremely busy for besides undertaking for farming chores of digging, sowing, weeding, harvesting and threshing. They crop, gather and process forest produce while at the same time reproducing and nurturing children.

7.2 Food

A wide range of food products from the forest have been identified as well as the activities that surround these types of food. Women are largely involved in the collection of mushrooms, caterpillars, wild fruit, tuber, fungi, relish and insect collection. The men concentrate on honey collection, fishing and hunting. The degree of household dependency on the forestry products as a food source across the country is enormous. The Gwembe valley ecology is known to have the highest edible wild food plants, which include among other things: fruits, tubers and grasses. A total of seventy (70) fruits and tubers, and nine (9) grasses as food items were documented in the Zambezi valley, now Kariba dam area (Scudder 1962/71 and Lancaster 1981). In a recent study of the use of forest products in Kafue Basin which falls in a similar ecological zone, foreseen reports of the inclusion of new items in the diet and the domestication of once wild tree species as well as intensification of fruit tree planting. The prevalence of drought and the consequential absence of adequate food during such times partly explain the large range. What is converted to food are normally poisonous species, which require laborious preparations before they are eaten. They are known to kill if not properly handled. (Chidumayo S. 1996).

All these products play an important role in sustaining the domestic economies of the collectors, sellers and buyers. The nutrition status of Zambians in general and of the urban poor in particular has gone down resulting in wide ranging malnutrition. Forest produce has played a migratory role in the sense that it has provided both diversity and nutrition to a measure of household dependence of forestry food products. Tweedie (1996 in Moore *et. el.*, p. 64) found that province of Zambia were forestry based. Some of the forest fruits for example are known to have superior nutrients. Among others Matobo and Tamarides have higher levels of Vitamin C compared to citrus fruits such as oranges.

Some of the wild fruits have proved critical in providing the rural population with food security. During drought periods wild food plants fill the gap. Fruit tubers and other food crops have been invaluable to the survival of the people during the lean months of December to February, providing them with the minimum nutrition for survival.

These can be found, but not stored, when the last harvest is finishing and the new crop is not yet ready or available in the dry season, e.g. mpundu, msongolo, masuku and baobab. In areas where cash crops take all the women's labour, and thus do not leave enough time for the gathering of wild food, the nutrition status of the family is known to deteriorate considerably (Moore and Vaugauan, 1994).

7.3 Medicines/Pesticides

In addition to food, fuel and shelter forests also continue to provide the general population with much needed medicines. The scarcity of modern medicines in Zambia, the increasing immunity of diseases to popular western medicines and the general trend towards natural medicines is increasing the use of forest products for prevention and healing purposes. Although medicine collection is not only done by women, they actively participate in the collection processing and sale of medicinal plants. Some trees produce pesticides. For example, *Baltites Aegytiaca* is currently being investigated for commercial use in the control of bilharzia.

8. Constraints To Women's Participation In The Forestry Sector

Women's participation to conservation in general and in forestry and in other resources is said to be constrained by land tenure, lack of mobility, time, training and education, support services and limited access to land and political power (Chileshe, Kasali and Mulombwa P.92).

8.1 Cultural Constraints

There are a few taboos surrounding forestry utilisation and management in Zambia including tree planting. Most cultural taboos affect the whole community for example the cutting of trees and the gathering of other forest products at cemeteries or shrines is forbidden to any one in most Zambian tribes. Among the Bembe of Northern Province, the cutting of *fiteme* by women is a taboo (Chileshe A: in Chidumayo 1996). Among the Luvale of North Western province women are prohibited from entering parts of the forest where *mukanda* or male circumcision and initiation ceremonies take place.

8.2 Land Tenure

Land Tenure is one of the major constraints to women's participation in most forestry activities. By virtue of their social, political and economic status in society, men tend to have more and better access to land as a resource. The fact that men have more access to both financial and material resources enable them to purchase, inherit or acquire land through other means.

Power relations therefore play an important role *vis-a-vis* land tenure. Access to land by women in the forestry sector is inhibited by the legal framework prevailing over issues in terms of laws governing inheritance, purchasing of land and acquisition of title. Lack of economic power among women inhibits their ability to purchase land or process title as much of it requires finance. The benefits of land tenure accrue to men and women disproportionately with more of the benefits accruing to men.

8.3 Time Constraint

Time constraint is possibly the most critical factor in the involvement of women in forestry activities. The dual role of reproduction and production of goods and services, in agriculture especially with its very exactingness in terms of activity performance, leaves women with very little to adequately get involved in forestry development. The constraint manifests itself more in agro-forestry activities. Studies from Kenya show that unless soil fertility improvements are a primary objective and these do not involve additional labour, the women keep away from participation due to limited time.

8.4 Lack of Mobility

Unless most forestry activities are farm or homestead based women do not participate actively as their combined responsibilities deter them from venturing far away from home.

8.5 Labour Shortage

In most areas of Zambia, demographic factors arising out of the history of large male rural-urban migration, which over time has made the female gender form a large proportion of population, entails they perform more of the work deemed to be male chores in other regions.

9. Working Against The Odds-Action Programmes To Combat Deforestation And Promote Rational Utilisation Of Forest Resources

The Zambian government has over time realised the importance of the forestry sector. In addition to support for forest management, the government has been pursuing various programmes, which increase the wood resources of the country. Some of these include:

9.1 National Tree Planting Programme

The main thrust of the programme is peoples' participation. On the occasion of the World Forestry Day on 21st March 1985 the then President declared 15th December to 15th January to be a national tree planting month. There were directives to raise 20 million seedlings annually but unless there is substantial investment this cannot be achieved. Targets that are set are not reached because of lack of resources like transport or containers and also germination of seeds supplied from the research divisions are said to be poor. This is probably due to the state of the seed storage facilities. Lack of transport also restricts distribution of seedlings.

The forest department embarked on the National Tree Planting programme since 1985 but its achievements have been modest. This is a very worthwhile programme, which will make farmers and communities increase wood resources and improve environment and land productivity. This programme requires strengthening with committed involvement of NGOs, institutions, and farmers in raising seedlings and increasing their availability.

10. Community Forestry

The extension services department spearheads the national tree planting. It creates awareness among the community and promotes tree planting. Community forestry offers an opportunity for the nation as a whole to participate in tree planting. National tree planting programme will only succeed with the active participation of the community particularly women whose vast and invaluable indigenous knowledge is very vital. However, despite the heavy emphasis placed on community forestry, the funding is inadequate.

11. Research

The division of forest research has been doing research in silviculture tree improvement and seed, forest pathology, soils, forest entomology. It has carried out species and provenance trials that have facilitated the establishment of fast growing species mainly pines and eucalyptus. Forest product research has included research in charcoal production and it has been demonstrated that production could be improved with the use of steel portable kilns and brick kilns. These however are costly and their use has not spread. These and other programmes have been set up to try and combat deforestation and to use forest resources as effectively as possible. Lack of funding, lack of political will as well as poor management and co-ordination have been blamed for the performance of some of the programmes. Over the years land use pressure resulting in the encroachment into areas in and around forest reserves for agriculture mining and other such activities has caused the degradation of extensive forest resource.

Further more, there has been an increase in deforestation due to slash and burn agricultural practices and extraction of woodfuel. It is for this reason that the government of the Republic of Zambia through the Ministry of Environment and Natural Resources (MENR) launched the Zambia Forestry Action Program (ZFAP) in July 1992 to try and restore the quality of the country's forest resources.

A number of activities have since been undertaken by ZFAP. Notable among these activities was the commissioning of Task Forces and Consultants to address various issues in the forestry sector. The marginal participation of women in the sector among other factors has led to the sectors' inability to realise its full potential. It was for this reason that a working group to look at gender forestry was set up. ZFAP advocates better community participation in forest management and involvement in planning, implementation and evaluation of forestry activities.

12. Conclusion And Recommendations

The role of Zambia's forestry sector has been widely acknowledged in different circles. The potential of the forestry sector has not, however, been tapped; despite heavy reliance on wood and non-wood products by both the rural and urban population. The decline of the Zambian economy points to the fact that there is a dire need to invest heavily in the forestry sector if it has to become an employer as well as a sustainable source of raw materials. Although many community Based Natural Resource Management Programmes have been initiated most have failed to reach their desired

objective due to lack of funds, lack of co-ordination and poor management systems. In particular the Tree Planting Programmes' failure can also be attributed to lack of a sense of ownership by the community who viewed it as a government programme with no immediate benefit to them. 'What is required is to make the community have a sense of ownership of the CBNRM programs by actively involving them in identification planning and implementing stages.

Women face a lot of constraints in their daily interactions with the environment. Their dependence on the forest for food, shelter, medicines etc. as well as their invaluable knowledge about the environment in general should enable them to be actively involved in environmental management. The success of CBNRM should focus on the interaction of gender in the forest sector with a view to improve the quality of life of the rural population. The results would be of immediate relevance for the implementation of the ZFAP.

ZFAP advocates better community participation in forest management and involvement of planning, implementation and evaluation of forestry activities. Needless to state, when designing CBNRM programmes a thorough diagnosis of needs, constraints and preference - as perceived by the target group - should be done, before designing any sustainable development. Solutions in CBNRM should be relevant and applicable to local conditions. This makes target group participation in formulating development policies crucial for lasting CBNRM. In stimulating such activities it must be remembered that unless local people can satisfy their basic requirements for food and woodfuel, and unless rising standard of living succeed in curbing population growth, it will be impossible to enforce forest protection measures. Moreover without understanding the interrelationships between the local livelihood conditions and local perceptions and priorities on land use and forest utilisation it will not be possible to develop and implement afforestation programmes. This means that there must be gender equity with respect to forest utilisation and ecological conditions. It is however difficult to achieve this within the present institutions due to limited human and financial resources. As such, collaboration between forest authorities and the local people must be initiated or strengthened to curb uncontrolled resource utilisation and to ensure a successful CBNRM programme.

References

- Agarwal, B. (1989)** "Rural Women, Poverty and Natural Resources: Sustenance, Sustainability and Struggle for Change," in: *Economic and Political Weekly*, Vol. XXIV, 46-65.
- Chidumayo, S. (1996)** "The Role of Women in Forestry in Zambia." ZFAP Secretariat, Lusaka.
- Chileshe, J. et. al., (1996)** "Task Force Report on Gender in Forestry in Zambia." ZFAP Secretariat.
- Chileshe, J., G. Kasali & J. Mulombwa (1996)** "Review of Current Status of Education Training, Research and Extension in Zambia." ZFAP Secretariat.
- Lwele, M. (1996)** "Impact of Deforestation on Women in Chinyunyu Area." UNZA, Lusaka.
- Moore, L. & Vangar (1994)** *Cutting down Trees: Gender, Nutrition and Agricultural Change in Northern Province of Zambia 1890-1990*. Heinemann Press.
- Scudder, T. (1996)** *The Ecology of the Gwembe Tonga*. [Manchester]: Manchester University Press (for Rhodes Livingstone Institute, Lusaka).
- Sibande, S. (1996)** "Forest Resource Management (*Draft Report*)." ZFAP Secretariat.
- Sorersen, C. (1993)** "Controls and sanctions in the use of Forest Products in the Kafue Basin of Zambia." – (ODI Rural Development Forestry Resource Network Paper 159).
- World Bank (1994)** *Poverty Assessment – Zambia*. Lusaka.



This work is licensed under a
Creative Commons
Attribution – NonCommercial - NoDerivs 3.0 License.

To view a copy of the license please see:
<http://creativecommons.org/licenses/by-nc-nd/3.0/>

This is a download from the BLDS Digital Library on OpenDocs
<http://opendocs.ids.ac.uk/opendocs/>